

## **5520, Shoals Community Schools**

### **PROJECT ABSTRACT**

Shoals Community School Corporation is fostering the potential of technology as a curriculum transforming agent by setting goals and objectives to improve reading and math test scores, provide new STEM opportunities to students through a valuable partnership with Loogootee Community School Corporation in Project Lead the Way, improve the graduation rate through online credit recovery, and continue to promote technological opportunities in AP History and AP Calculus classes at Shoals High School.

A valuable partnership with Loogootee Community School Corporation will offer teachers in grade 3 guidance and support in implementing an i-Touch classroom lab utilizing math applications to improve test scores. Loogootee already has an outstanding Project Lead The Way program implemented and students at Shoals will have the opportunity to enroll as part of this grant proposal. Teacher in-service between the two schools will include software instruction with programs that will help students score better on AP tests as well as ISTEP and ECA tests. This partnership will allow teachers to collaborate and share strategies used in math and reading instruction. The online credit recovery project may increase graduation rates.

Loogootee Jr/Sr High School is a PLTW school and has a Cisco Networking Academy as a part of the coursework offered. The local Academy at Loogootee is directly tied to the regional academy in the Electronics Division in the School of Technology at Vincennes University. Loogootee will be partnering with Shoals to help them become a PLTW school through professional development and training. Loogootee will be providing Shoals students with the necessary coursework until their program becomes fully implemented at the end of the grant cycle. Research indicates that PLTW graduates are 5 to 10 times more likely than non-PLTW graduates to study postsecondary engineering and technology. 95 percent of PLTW seniors say they're excited and prepared for college and careers. 97 percent of PLTW seniors intend to pursue four-year degrees.

In 2003, the Indiana General Assembly passed legislation changing the formula for calculating graduation rates. Therefore, any student that does not graduate with their class/cohort in four years is counted against the graduation rate for the school even if they do graduate the next semester or year. Both Shoals and Loogootee Jr./Sr. High Schools missed AYP in 2008 due to graduation rates. Loogootee Jr./Sr. High school began developing a credit recovery program primarily to help students to recover course credits from classes they have missed or failed thereby enabling those students to graduate on-time. Since the programs inception in 2008, it has also been used to provide remediation to students that have passed a course with a classroom teacher but did not pass the Core 40 End-of-Course

Assessment for that course. Moreover, high ability students have benefited from the program by providing them with courses they may not be able to take during the regular school day because of scheduling conflicts and/or lack of course offerings. Shoals will be partnering with Loogootee specifically to help students to recover course credits from classes they have missed or failed and thereby graduate on time.

Shoals High Ability classes include 11 dual credit and/or AP class options. 12 students study AP History, AP Calculus has 6, and 13 are in Pre-Calculus. Higher level thinking applications involving Bloom's Taxonomy will be incorporated into the classes using technology to raise student test scores.

Needs were identified using teacher surveys, ISTEP+ and ECA scores, graduation statistics, growth model projections, teacher meetings, technology committee meetings, administrative meetings, and SIP goals to identify the primary focus areas. Both school corporations need to improve the graduation rate and to increase test scores in specific subgroups (special education, f/r lunch).

#### **NEEDS/BASELINE**

Shoals Community School Corporation is a small, rural, isolated corporation located outside the town border of Shoals, Indiana and surrounded by cornfields. The population of the community is downsizing as residents are relocating. The elderly population is declining due to death, or moving to nursing home facilities or assisted living. The two gypsum companies are the main sources of employment for residents of Martin County. Crane Naval Depot occupies a large part of the county. Mom and Pop style businesses, trucking, and farming make up other areas of employment.

The school corporation is housed in one building that is joined by a connecting hallway/ramp. The elementary school (K-6) and the Jr./Sr. High School have a combined enrollment of 676. Fifty-one classrooms will benefit from the goals and objectives of the grant and 51 teachers will be involved in professional development.

Shoals Jr./Sr. high School has a free/reduced lunch rate of 42 percent and Shoals Elementary School has a 52 percent free/reduced lunch rate. The corporation average free/reduced lunch rate is 48 percent.

Shoals Community School Corporation, like all school corporations in Indiana, strives to improve their test scores and improve student achievement in reading, writing and math. DLP Projectors were installed in all classrooms and mini-labs were installed in all elementary classrooms during the summer of 2009. This grant focuses on software and curriculum strategies that will help meet that goal.

Shoals Jr./Sr. High School has not made Adequate Yearly Progress in recent years due to graduation rate decline and the special education subgroup scores on ISTEP tests. Shoals Jr./Sr. High School is a Title I school in the level of corrective action and Choice letters were sent to parents for the past three years. In 2008 and 2009, Shoals Jr./Sr. High school offered SES tutoring to students as part of the Title I School Improvement Plan. Shoals Elementary School has seen a drop in their scores and did not make Adequate Yearly Progress in 2009. Shoals Elementary sent Title I Choice letters for two years, but was not in Title I School Improvement during the 2008 school year.

Today's students have grown up with technology and are more techno-savvy than many adults. Technology interests them and they are captivated by watching and using it. If we want our test scores to improve, we need to reach students through the means they are most comfortable and interested in using.

Loogootee Community School Corporation has had a declining graduation rate and low subgroup scores (free and reduced lunch, special education) in recent years. Since the SIP goals of both corporations focus on the same areas, a partnership may benefit students in both schools. Loogootee has Project Lead the Way in place and is willing to network to help Shoals establish a program. The free and reduced lunch rate in the Loogootee School Corporation is lower than Shoals. The corporation has a 30 percent overall rate with Loogootee East listing 30 percent, Loogootee West reaching 33 percent, and the Jr./Sr. High totaling 28 percent.

Both the 3rd grades at Shoals and Loogootee had Low Growth, Low Achievement on the recent Growth Model data that was released. Therefore a particular emphasis in this grant has been placed on third grade math because of that data and the importance of getting a "jump start" on that first year testing.

## **GOALS/OBJECTIVES**

Goal One: Improve ISTEP and ECA scores 5 percent.

\* Improve ISTEP and ECA test scores in grades 7 through 12 through the use of USA Test Prep and new technology strategies .

\* Improve ISTEP scores through MClass (K, 1, 2) and Acuity (3, 4, 5, 6).

In first grades K, 1 and 2 Dibels/MClass is used to test and monitor the following areas:

MClass Reading:

Letter Naming Fluency

Nonsense Word Fluency

Oral Reading Fluency

Phoneme Segmentation Fluency

Word Use Fluency

Text Reading and Comprehension

MClass Math:

Counting

Missing Number

Next Number

Number Identification

Number Facts

Qty. Discrimination

Progress monitoring is completed every 2 weeks for students who are intensive and every 4 weeks for students who are strategic. By monitoring the progress for these students teachers are better able to tailor instruction to their individual needs.

In grades 3, 4, 5, and 6 Acuity tests over language arts, math, science and social studies. It accesses how well each standard area is mastered. Instructional Materials are then assigned in the weak areas until mastery is made. Let me know what else you need.

The remediation comes in the form of the instructional materials. They are mini lessons over material that the students did not pass during the acuity tests. The teachers assign instructional materials and the students can log onto the computer and work on them. Then they take a short assessment over the material and the teacher can see if improvement was made.

\* The professional development component for Shoals Elementary teachers will include in-service and implementation of three computer classroom mini-labs in each classroom. Teachers will study software,

websites, and strategies to use while incorporating technology into the state standards to improve test scores. Third grade teachers will be in-serviced to use a classroom i-Touch cart in a partnership project. All Shoals teachers K-12 will have access to i-Touch classroom labs.

- \* The professional development component for secondary teachers will include in-service and implementation of software programs, the credit recovery program, interactive write boards, classroom response systems, a graphing calculator program for AP Calculus, Project Lead the Way training, CAD draw, and a classroom i-Touch labs.

Goal Two: Improve the graduation rate.

- \* Implementation of the software program including Odysseyware, an online Credit Recovery Program, will allow Shoals and Loogootee students to catch up on credits to be able to graduate. The School Improvement Plans of both school corporations include a goal of raising the graduation rate. Students will be able to participate in credit recovery in English, Math, Biology, and Social Studies during the summer of 2010. Students at Loogootee have already used the credit recovery program.

- \* Professional development of Shoals staff will introduce the program in January and implement in May 2010.

Goal Three: Project Lead The Way, an Engineering and Technology program, at Loogootee High School will network with Shoals High School as Shoals begins a PLTW project.

- \* Upgrade CAD Lab at Loogootee High School by adding additional stations.

- \* In-service teachers about Project Lead the Way and encourage Shoals students to participate.

- \* Implement a start-up project of PLTW at Shoals.

- \* In-service Tom Elliott as Shoals PLTW instructor.

Goal Four: AP teachers will strive to improve test scores of AP Calculus and AP History students.

- \* AP teachers attend Indiana Conference of Gifted Students and focus on sessions to improve AP test scores.

- \* AP teachers implement higher level thinking skills.

\* Professional development for AP Calculus and AP History teachers will include the implementation of higher learning skills into classroom curriculum utilizing technology strategies. Components of the higher level thinking skills will include focus on Bloom's Taxonomy and complex problem solving skills.

## **METHODS/ACTIVITIES**

Grade 3 in both Corporations:

\* Implementation of classroom i-Touch lab which will be rotated among the classrooms in the grade level at each elementary to improve the math scores.

\* Math Applications on the i-Touch aligned with state standards will improve student math scores on the test.

Classroom Response Systems:

Classroom Response Systems will be available to teachers in all grade levels of both corporations to improve student test scores by actively engaging students in classroom learning.

\* Turning Point CRS systems will be used in conjunction with the social studies textbook adoption materials.

\* Turning Point CRS systems will be used by teachers to manually import teacher written tests and quizzes.

\* Smart System CRS systems will be used by teachers to improve reading, math and science scores.

Interactive Write Boards:

Interactive Write Boards will be used to promote interactive learning in the classrooms.

\* Teachers and students will have the opportunity to use the slates as part of classroom learning.

All Shoals teachers will implement an interactive write board into the classroom as an addition to the In-Focus ceiling projectors that each classroom received in summer 2009 as part of the local CPF project.

The AP Calculus teacher will use the interactive write board as an instructional tool for students to demonstrate how to work problems to the class.

CAD Draw students will use the board for curriculum drawing.

Art, Home Economics Interior Design students, and pre-Calculus students will demonstrate class projects with the technology.

#### i-Touch Classroom Labs:

i-Touch Classroom learning labs will be used by teachers in addition to the Grade 3 Project to improve scores in reading, math, and science.

- \* Teachers will use applications appropriate to their curriculum.
- \* Shoals AP History students will be challenged with appropriate higher level thinking skill applications.

#### Project Lead The Way:

Shoals and Loogootee will partner together as Shoals begins a Project Lead The Way program.

- \*Ernie Martin and Tom Elliott will network on curriculum strategies as Shoals models the PLTW project.
- \*Tom Elliott will attend professional development workshops for two years during July for PLTW.
- \*Tom Elliott will implement a start-up program at Shoals beginning in August 2010.

#### Credit Recovery:

Shoals and Loogootee both plan to improve their graduation rate by using Odysseyware, an online credit recovery program for students.

- \*Mike Tippery will in-service Shoals teachers about the Odysseyware software program which Loogootee has been using.
- \*Counselor Larry Sherfick will work with designated teachers who will mentor students in the credit recovery program in specific core courses (Algebra, English, Biology).
- \*Odysseyware program will be implemented at Shoals for summer 2010 and will continue for two years.

#### Professional Development:

Professional Development will be given to teachers and administrators as needed to implement and use the new technology tools procured by the grant money.

- \* Loogootee will partner with Shoals in professional development and will provide in-service sessions for teachers in both corporations.

\* Shoals and Loogootee will plan tech in-service days into the school calendar so that teachers from both schools may join together to learn about technology.

\* Third Grade Teachers in both corporations will meet and train together to implement the 3rd grade i-Touch project.

#### TEST SCORE IMPROVEMENT:

Teachers in both corporations will utilize technology to improve test scores.

\*USA TEST Preparation software will be implemented into the curriculum to improve reading comprehension, math skills, and biology comprehension.

\*Reuben Montgomery will in-service Shoals teachers about new software.

#### Technology Committee:

Corporation Technology Committees will meet to discuss the implementation progress of the grant project.

#### Bandwidth:

Shoals will pay bandwidth costs.

#### **PROFESSIONAL DEVELOPMENT**

##### Improving Test Scores

\* 3rd Grade Teachers in both corporations will utilize math applications with the i-Touch Classroom Learning Labs to improve math test scores on the ISTEP. They will participate in joint in-service about using the applications and the Classroom Response feature of the classroom labs to meet and surpass state standards.

\* 3rd Grade Teachers in both corporations will network together to study websites and Internet instructional strategies that might improve test scores. They will work together to implement ideas in the curriculum and will evaluate which strategies used were successful and should remain and which strategies used were not successful and should be abandoned.



\* Teachers in both corporations will use USA TEST preparation software to improve ECA test scores in English, Algebra, and Biology. All Shoals teachers will receive an overview in-service about the software and the specific team in each school will be in-serviced to implement the use of the program with students.

\* All Shoals K-12 teachers will be inserviced about the interactive write boards that will be added to the classroom projectors (installed in all classrooms during summer 2009). Teachers will use best practices and websites for their specific subject area to implement teaching strategies that will improve test scores in their grade level.

\* All Shoals K-12 teachers will be in-serviced about the i-Touch classroom labs and will have an opportunity to choose applications for their subject level that will improve curriculum instruction.

\* All Shoals K-12 teachers will be in-serviced about the Classroom Response System i-Touch classroom lab feature so that they may use quizzes and exams in the classroom using CRS. Some textbook adoption materials (social studies) have already provided teachers with CSR CD's to use and future textbook adoptions will probably include these materials. Teachers will also have the option of creating and using their own CSR materials to improve test scores.

\* AP History and AP Calculus teachers at Shoals will learn about higher level thinking applications for the i-Touch classroom labs to improve High Ability student test scores.

#### Credit Recovery

\* Staff in both corporations will receive an overview in-service about Odysseyware credit recovery software. The specific team in each school will be in-serviced to implement the use of the program with students desiring credit recovery for graduation.

#### STEM/PLTW

\* Tom Elliott and Ernie Martin will network in PLTW. Loogootee will be partnering with Shoals to help them become a PLTW school through professional development and training. Loogootee will be providing Shoals students with the necessary coursework until their program becomes fully implemented at the end of the grant cycle.

## Evaluation

\* All Shoals teachers and Loogootee partnership teachers will participate in the formative and summative evaluation at the conclusion of the grant. An outside evaluator will in-service teachers about surveys and evaluation processes used to determine the success of the projects included in the grant.

Local funds will support professional development in the following areas:

\* Teacher stipends will be paid from professional development funds not included in the grant proposal. Approximately 700 dollars has been set aside in the grant application, but summer workshop in-service stipends will cost more than that. At least 10,000 will be set aside as a match.

\* Teacher technology in-services not outlined in the grant, but requested by teachers to implement grant activities, will be paid by corporation funds. Teacher workshops will become available in the next 18 months that the grant writer is unaware of at this time and teachers may request to attend such opportunities as they become available.

## **FORMATIVE/SUMMATIVE EVALUATION**

### SUMMATIVE EVALUATION

Summative evaluation will be provided by an outside evaluator from the Indiana Department of Education (DOE).

\* Outside evaluator will provide an end review of the grant project and will suggest adjustments to the program implementation and timeline for technology advancement in future years.

### FORMATIVE EVALUATION

Formative evaluation will study what the users and stakeholders did repeatedly with the technology to achieve their goals. In order to improve outcomes from technology, data must show how the technology was actually used in the implementation of the activities.

Teachers will be in-serviced about a specific evaluation plan that is presented to assess the impact of the project on students, faculty, and administrators utilizing teacher surveys, student test data, and curriculum mapping/curriculum alignment utilizing the new equipment and software.

For example, data for the use of CRS systems will include a survey on what students and faculty are actually doing with the clickers. Is CRS being used to ask challenging conceptual questions and then to foster peer debate about those questions? Or is it used to test memorization?

Different students (and faculty) will have different goals, needs, and outcomes (unique uses). For example, students in the 3rd grade math i-Touch project and the AP Calculus class will use the same innovation (i-Touch) to improve math scores but will have qualitatively different skills and preparation and will use the innovation technology application differently with a unique uses design.

In contrast, an evaluation design that begins with the assumption that certain outcomes should be studied for all students (and faculty) as in the credit recovery Odysseyware and the PLTW will have a uniform impact design. The delivery and results of these two components will always be evaluated the same way.

Our formative evaluation has been designed with both unique uses outcomes and uniform impact to fit the goal and activity being studied.

Goal One: Improve ISTEP and ECA scores 5 percent.

- \* Data from ISTEP scores will indicate if there is a gain in student achievement scores.
- \* STAR data and DOE Learning Connection data will be used to study test proficiencies.

Goal Two: Improve the graduation rate.

- \* Data will provide the number of students enrolled and their use of the Odysseyware program.

- \* Surveys of teachers, students, parents.
- \* Data will provide graduation rates achieved.

Goal Three: Project Lead The Way, an Engineering and Technology program, at Loogootee High School will network with Shoals High School as Shoals begins a PLTW project.

- \* Data will provide number of students enrolled.
- \* Networking data from partnership teachers regarding Shoals PLTW program.
- \* Surveys of teachers, students, parents.

Goal Four: AP teachers will strive to improve test scores of AP Calculus and AP History students.

- \* Data on test scores.
- \* Surveys of teachers, students, parents.

Formative Evaluation will include:

- \* Surveys of staff about DLP projectors and Interactive Writing Boards regarding the use of technology in presenting curriculum and meeting state standards.
- \* Staff survey about use of Classroom Response Systems in their classrooms.
- \* Staff survey about use of i-Touch Classroom Labs in their classrooms.
- \* Teachers will provide a formative end evaluation of their individual professional development during the grant.

\* Networking for professional development will include in-service of Shoals teachers and classroom visits to see mini-labs, CRS systems, and i-Touch labs in use throughout the year. Teachers will share strengths and weaknesses in implementation with building principals.

\* Survey about in-service presentations and in-service requests will be conducted in January 2009, August 2010, December 2010 and May 2011.

#### **LOCAL MATCH**

\$31,500

Local funds will support the project in the following areas:

Professional Development: Teacher stipends will be paid from professional development funds not included in the grant proposal. Approximately 700 dollars has been set aside in the grant application, but summer workshop in-service stipends will cost more than that. \$10,000 will be set aside as a match.

Professional Development: Teacher technology in-services not outlined in the grant, but requested by teachers to implement grant activities, will be paid by corporation funds. Teacher workshops will become available in the next 18 months that the grant writer is unaware of at this time and teachers may request to attend such opportunities as they become available. \$6,000 has been set aside to meet these training needs.

Software Applications: Additional money from CPF funds will provide for i-Touch applications that teachers in K-12 may choose to add to the classroom instruction labs. \$5,500 had been set aside for additional software purchase following implementation and use of the equipment.

Additional computer equipment not outlined in the grant needed for Project Lead the Way will be paid by CPF funds. As the program is set up at Shoals High School, additional costs that are not apparent now may arise. \$10,000 has been set aside for this area.

## **PARTNERSHIPS**

### **Improving Test Scores**

Loogootee schools have consistently scored well on ISTEP and have finished above state average as a corporation every year. In 1994 Loogootee Schools embarked on a massive technology program that included among other things, computers in every classroom. A cornerstone of that project was placing 5 student computers in every elementary classroom. Over the years, Loogootee teachers and students have utilized network-based and now web-based curriculum software to improve understanding on state standards and perform above the state average on state-wide testing. In 2008, Shoals schools made the investment of adding 3 student computers in every classroom. Loogootee teachers will collaborate with Shoals on best practices in integrating the computers in the classroom, investigating and developing web-sites that support the curriculum, and integrating newly purchased technologies in the classroom. Moreover, Shoals Community Schools purchased projectors for every classroom in 2008. Loogootee will be adding projectors in the K-6 classrooms and will partner with Shoals on best practices in utilizing those projectors to deliver curriculum. This partnership will also offer teachers in grade 3 guidance and support in implementing an i-Touch classroom lab utilizing math applications to improve test scores.

### **Graduation Rate**

Shoals will be partnering with Loogootee specifically to help students to recover course credits from classes they have missed or failed and thereby graduate on time. Loogootee is utilizing Odysseyware, a leading provider of online-based curriculum and e-learning solutions as the technology component of its Credit Recovery Program. Loogootee currently has 5 concurrent seats for their program. Grant funds to purchase 5 additional seats would allow both Shoals and Loogootee students to participate in the same on-line learning environment. Shoals staff members will work with Loogootee Staff members to review and develop curriculum and receive training for the program.

The program will be run by a Credit Recovery Program Coordinator at each school who will work with the students to provide them with the necessary course work. A Credit Recovery Committee, consisting of the Principal or designee, Guidance Counselor, Curriculum Director, and at least one subject-area classroom teacher, will determine eligibility and set up course work.

### **STEM/PLTW**

Loogootee Jr/Sr High School is a PLTW school offering students Introduction to Engineering Technology and Principles of Engineering. Loogootee also has a Cisco Networking Academy as a part of the coursework offered. The local Academy is directly tied to the regional academy in the Electronics Division in the School of Technology at Vincennes University. All CISCO classes can be taken for college credit through Project Excel and are exactly the same classes that are taught at Vincennes University.

The use and configuration of 21st century technology equipment is the thrust of these courses. Graduates of a Cisco Academy are qualified to serve as Computer Network Administrators, Networking Equipment Installation and Configuration Technicians, Help Desk Administrators, and Networking Managers. The primary emphasis for the CISCO Program is network design and administration.

Loogootee will be partnering with Shoals to help them become a PLTW school through professional development and training. Loogootee will be providing Shoals students with the necessary coursework until their program becomes fully implemented at the end of the grant cycle.